LABQUALITY

External Quality Assessment Scheme

Streptococcus pyogenes (Group A), nucleic acid detection in pharyngeal sample Round 1, 2023

Specimens

Please find enclosed 3 simulated pharyngeal samples S001, S002 and S003, each 1 mL.

Caution

The samples are inactivated but should be handled with the same care as patient specimens.

Examinations

Streptococcus pyogenes (Group A), nucleic acid detection in pharyngeal sample.

Storage and use

After arrival the samples should be stored at +2...8 °C and analyzed as soon as possible. Let the samples warm up to room temperature and mix well by inverting the tubes several times. Put a sample collection swab into the sample tube, mix and let it absorb for 10 seconds. In the sequel follow the instructions given by the test manufacturer.

The samples are not suitable for throat culture.

Result reporting

Please enter the results and methods via LabScala (www.labscala.com). If you cannot find your instrument or reagent in the menu, please contact the EQA Coordinator.

Additional results (max 3/sample) can be reported if the sample volume is sufficient for the test kits in question. If multiple results are reported, only results reported for different test kits will be processed, not parallel results for the same kit. Always report results for the entire set of samples (S001, S002 and S003). All reported results will be scored.

If you have also ordered the *Streptococcus pyogenes* (Group A), antigen detection in pharyngeal sample (5595) round, you should add these results in the same view in LabScala (see picture below).

<<Pre>
< Streptococcus pyogenes (Group A), nucleic acid detection in pharyngeal sample>> Streptococcus pyogenes (Group A), antigen detection in pharyngeal sample>> Streptococcus pyogenes (Group A), antigen detection in pharyngeal sample>> Next step

S001





S002



2023-03-06

INSTRUCTIONS

Product no. 5593 LQ761323011-013/US

Subcontracting: Sample pretesting

If the kit is incomplete or contains damaged specimens, please report immediately to info@labquality.fi.

The results should be reported no later than **March 24, 2023**.

The expected results of the round are published in LabScala in the View Reports section by March 29, 2023.

Inquiries

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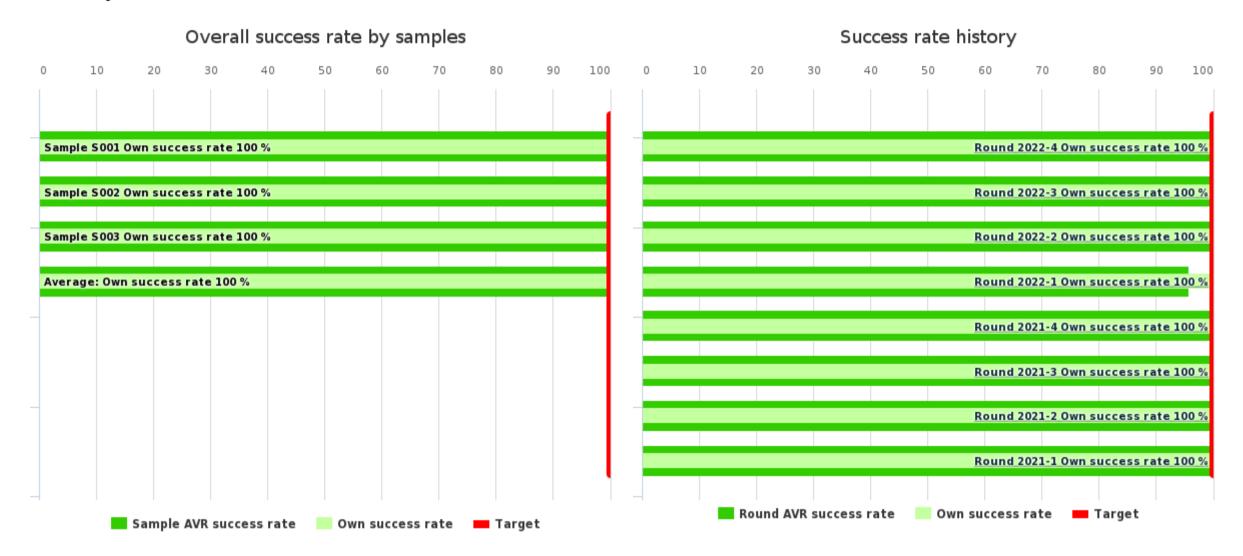




Client report

	No of participants	No of responded participants	Response percentage
Streptococcus pyogenes (Group A), nucleic acid detection in pharyngeal sample, March, 1-2023	9	9	100 %

Summary



Summary	Own score	Max score	Own success rate	Difference	AVR success rate
Sample S001	2	2	100 %	0 %	100 %
Sample S002	2	2	100 %	0 %	100 %
Sample S003	2	2	100 %	0 %	100 %
Average:			100 %	0 %	100 %

History	Test nr.	Own success rate	Difference	AVR success rate
Round 2022-4	1-1	100 %	0 %	100 %
Round 2022-3	1-1	100 %	0 %	100 %
Round 2022-2	1-1	100 %	0 %	100 %
Round 2022-1	1-1	100 %	4.2 %	95.8 %
Round 2021-4	1-1	100 %	0 %	100 %
Round 2021-3	1-1	100 %	0 %	100 %
Round 2021-2	1-1	100 %	0 %	100 %
Round 2021-1	1-1	100 %	0 %	100 %

31.03.2023 1/5



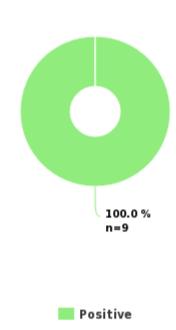


Sample S001



Sample S001 results	Responded	Own score	Max score	Own success rate	Difference	AVR success rate	Count
	Strep A NAT	2	2	100 %	0 %	100 %	9
Total:		2	2	100 %	0 %	100 %	9

Sample S001 Strep A NAT



STREP A NAT

Profession	AVR success rate
Laboratory professional	100 %
Nursing	100 %
Total:	100 %

Profession	Result	Test kit	Result count	Test kit count	Own score	Max score	Own success rate	Difference	AVR success rate
Laboratory professional			7		2	2	100 %	0 %	100 %
	Positive		7		2	2	100 %	0 %	100 %
		ID NOW Strep A 2 (Abbott)		6					
		● In House Method		1					
Nursing			2		-	-			100 %
	Positive		2		-				100 %
		ID NOW Strep A 2 (Abbott)		2					
Total:			9		2	2	100 %	0 %	100 %

Result	Result count
Positive	9
Total:	9

2/5 31.03.2023



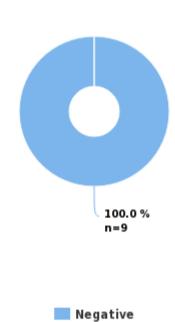


Sample S002



Sample S002 results	Responded	Own score	Max score	Own success rate	Difference	AVR success rate	Count
	Strep A NAT	2	2	100 %	0 %	100 %	9
Total:		2	2	100 %	0 %	100 %	9

Sample S002 Strep A NAT



STREP A NAT

Profession	AVR success rate
Laboratory professional	100 %
Nursing	100 %
Total:	100 %

Profession	Result	Test kit	Result count	Test kit count	Own score	Max score	Own success rate	Difference	AVR success rate
Laboratory professional			7		2	2	100 %	0 %	100 %
	Negative		7		2	2	100 %	0 %	100 %
		ID NOW Strep A 2 (Abbott)		6					
		● In House Method		1					
Nursing			2		-	-			100 %
	Negative		2		-				100 %
		ID NOW Strep A 2 (Abbott)		2					
Total:			9		2	2	100 %	0 %	100 %

Result	Result count
Negative	9
Total:	9

3/5 31.03.2023



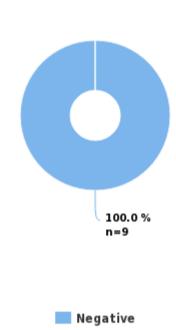


Sample S003



Sample S003 results	Responded	Own score	Max score	Own success rate	Difference	AVR success rate	Count
	Strep A NAT	2	2	100 %	0 %	100 %	9
Total:		2	2	100 %	0 %	100 %	9

Sample S003 Strep A NAT



STREP A NAT

Profession	AVR success rate
Laboratory professional	100 %
Nursing	100 %
Total:	100 %

Profession	Result	Test kit	Result count	Test kit count	Own score	Max score	Own success rate	Difference	AVR success rate
Laboratory professional			7		2	2	100 %	0 %	100 %
	Negative		7		2	2	100 %	0 %	100 %
		ID NOW Strep A 2 (Abbott)		6					
		● In House Method		1					
Nursing			2		-	-			100 %
	Negative		2		-				100 %
		ID NOW Strep A 2 (Abbott)		2					
Total:			9		2	2	100 %	0 %	100 %

Result	Result count
Negative	9
Total:	9

31.03.2023 4/5





Report Info

PARTICIPANTS

Altogether 9 laboratories from 3 countries participated in this EQA round.

REPORT INFO

The results are divided into groups according to the profession and method stated by the laboratory and presented in laboratory-specific tables. Accepted results are marked with green color and laboratory's own result with a black radio button . In the scoring report you will find summaries of overall success rate and sample specific success rates (%). Sample specific results are shown in pie diagrams as percentages and the total methodic counts in the tables. If you have not reported any results you will get a note: "You have not responded in time, only global report is

For information on report interpretation and performance evaluation, please see the "EQAS Interpretation guidelines" in LabScala User instructions. In case you have any questions regarding the reports, please contact the EQA Coordinator.

SCORING

The round is scored based on test results when 60% or more of the participants report the expected result. The following general rules are applied:

Correct/expected test result 2/2 points Deviating positive/negative result 0/2 points

The performance of the laboratory is assessed by the Own success rate (%). The target is 100%. The examination-specific scores obtained by the laboratory in the round are converted to Own success rate per sample (scores/maximum scores*100). The Laboratory's Own success rate is the average of the sample success rates.

The success rate for the entire round (AVR success rate) is calculated from the total number of scores given to the results per sample (all scores/maximum scores*100). The AVG success rate of the entire round is the average of the sample success rates. The difference in the Laboratory's Own success rate (%) to the corresponding numbers for the entire round is shown in the table.

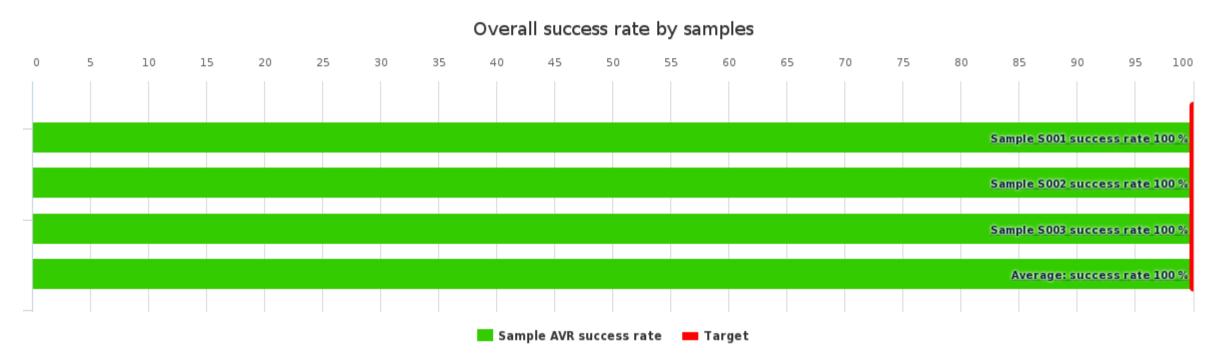
31.03.2023 5/5



GLOBAL REPORT

	No of participants	No of responded participants	Response percentage
Streptococcus pyogenes (Group A), nucleic acid detection in pharyngeal sample, March, 1-2023	9	9	100 %

Summary

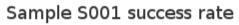


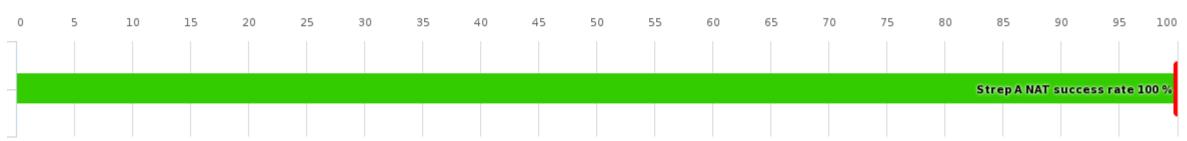
Summary	Profession	AVR success rate
Sample S001		100 %
	Laboratory professional	100 %
	Nursing	100 %
Sample S002		100 %
	Laboratory professional	100 %
	Nursing	100 %
Sample S003		100 %
	Laboratory professional	100 %
	Nursing	100 %
Average:		100 %

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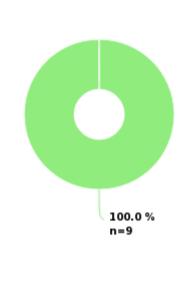
Sample S001





Sample S001 results	Responded	AVR success rate	Count
	Strep A NAT	100 %	9
Total:		100 %	9

Sample S001 Strep A NAT



Positive

STREP A NAT

Profession	AVR success rate
Laboratory professional	100 %
Nursing	100 %
Total:	100 %

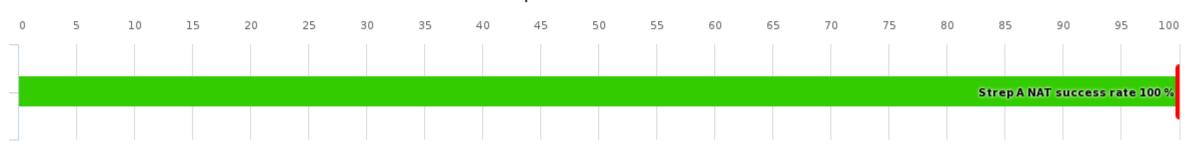
Profession	Result	Test kit	Result count	Test kit count	AVR success rate	Result Score
Laboratory professional			7		100 %	
	Positive		7		100 %	2
		ID NOW Strep A 2 (Abbott)		6		
		In House Method		1		
Nursing			2		100 %	
	Positive		2		100 %	2
		ID NOW Strep A 2 (Abbott)		2		
Total:			9		100 %	

Result	Result count
Positive	9
Total:	9



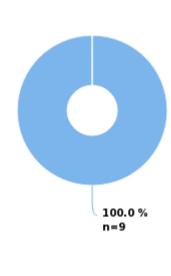
Sample S002

Sample S002 success rate



Sample S002 results	Responded	AVR success rate	Count
	Strep A NAT	100 %	9
Total:		100 %	9

Sample S002 Strep A NAT



Negative

STREP A NAT

Profession	AVR success rate
Laboratory professional	100 %
Nursing	100 %
Total:	100 %

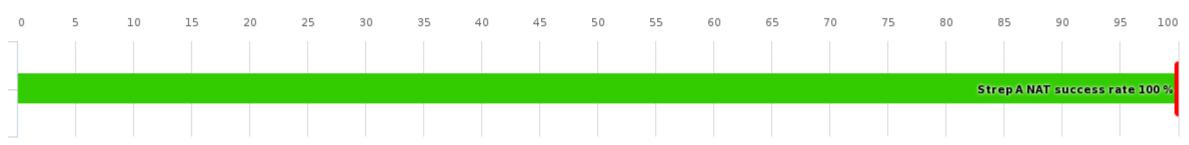
Profession	Result	Test kit	Result count	Test kit count	AVR success rate	Result Score
Laboratory professional			7		100 %	
	Negative		7		100 %	2
		ID NOW Strep A 2 (Abbott)		6		
		In House Method		1		
Nursing			2		100 %	
	Negative		2		100 %	2
		ID NOW Strep A 2 (Abbott)		2		
Total:			9		100 %	

Result	Result count
Negative	9
Total:	9



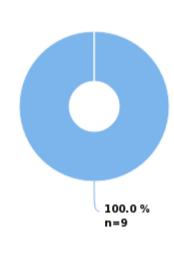
Sample S003





Sample S003 results	Responded	AVR success rate	Count
	Strep A NAT	100 %	9
Total:		100 %	9

Sample S003 Strep A NAT



Negative

STREP A NAT

Profession	AVR success rate
Laboratory professional	100 %
Nursing	100 %
Total:	100 %

Profession	Result	Test kit	Result count	Test kit count	AVR success rate	Result Score
Laboratory professional			7		100 %	
	Negative		7		100 %	2
		ID NOW Strep A 2 (Abbott)		6		
		In House Method		1		
Nursing			2		100 %	
	Negative		2		100 %	2
		ID NOW Strep A 2 (Abbott)		2		
Total:			9		100 %	

Result	Result count
Negative	9
Total:	9



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30.03.2023 5/5

LABQUALITY

External Quality Assessment Scheme

Streptococcus pyogenes (Group A), antigen detection in pharyngeal sample (5595) Streptococcus pyogenes (Group A), nucleic acid detection in pharyngeal sample (5593) Round 1, 2023

Specimens

Samples of this EQA round were simulated liquid pharyngeal samples. The sample lots were tested in the scheme expert's laboratory and the results were consistent with the certificates provided by the sample manufacturer. Based on the quality controls conducted by the sample material manufacturer, pre-testing and the results obtained in the round, the sample lots are to be considered as homogeneous, stable and suitable for external quality assessment. The materials were sent without temperature control packaging.

The expected results were as follows:

Antigen detection:

Sample S001 (LQ761323011) Positive/Weak positive

Sample S002 (LQ761323012) Negative Sample S003 (LQ761323013) Negative

Nucleic acid detection:

Sample S001 (LQ761323011) Positive Sample S002 (LQ761323012) Negative Sample S003 (LQ761323013) Negative

Pretest methods: QuikRead go Strep A (Aidian/Orion Diagnostica) and QuickVue Dipstick Strep A (Quidel) (antigen tests) and ID NOW Strep A2 (Abbott) (nucleic acid detection test).

Report info

Please see the description of the data analysis on the last page of the laboratory-specific reports and global reports. It is important to read the Final report first, because it contains important information of the samples and results in each round.

Comments - Expert

In this round sample S001 was positive or weak positive containing group A streptococcus suspension approx. 10⁶ bacteria/mL and samples S002 and S003 were negative containing group G streptococcus suspension approx. 10⁷ bacteria/mL.

Antigen detection

Of laboratory professionals 96.3 % reported the sample S001 correctly as positive or weak positive. Of the laboratory professionals 99.6 % and 99.3 % reported samples S002 and S003 correctly as negative. Exactly 93 % of the nursing professionals reported sample S001 correctly as positive or weak positive. Of the nursing professionals 98.8 % and 98.0 % reported samples S002 and S003 (respectively) correctly as negative. During this round the results concerning negative samples were excellent. Positive sample seemed again to be more challenging than negative samples.

A few false positive or false negative results were again reported. They were probably due to a false interpretation of the test or mixing up samples.

2023-04-11

FINAL REPORT

Product no. 5595, 5593

Subcontracting: Sample pretesting

 Samples sent
 2023-03-06

 Round closed
 2023-03-24

 Expected results
 2023-03-29

 Final report
 2023-04-11

Request for correction

Typing errors in laboratory's result forms are on laboratory's responsibility. Labquality accepts responsibility only for result processing. Requests must be notified by writing within three weeks from the date of this letter.

Authorized by

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Expert

Clinical Microbiologist, PhD Joanna Peltola, NordLab, Finland

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Nucleic acid detection

All nine (9) participants using nucleic acid tests reported sample S001 correctly as positive and samples S002 and S003 correctly as negative.

Exceptions in scoring

No exceptions.

End of report

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